

## Collecting Lepidoptera and Other Insects in Sicily in 1975

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Sicily, the island nearest to Malta, has lately been my favourite collecting place. I have paid five visits there since 1969 and written accounts of the first three.

This time I stayed from 7th-14th May at Zafferana Etnea on the slopes of Mt. Etna and some 800 metres above sea level. I decided thoroughly to explore the area there about Albergo del Bosco (Emnaus) by collecting some 200m. higher up and 100m. lower down. My nine floor hotel with so many balconies and terraces, and surrounded as it was by woods of chestnut and oak and a very rich flora, would have been an excellent place for collecting moths, but owing to lighting restrictions only the most essential lights were in use. However, I found one didn't need to exert oneself too much as both in the hotel grounds and by the roadsides leading to the volcano there grew an enormous abundance of wild flowers of different species such as *Cherithe major*, *Geranium sanguineum*, *Lathyrus nissolia* and *Centhranthus ruber*, all of which attracted a great variety of insects.

I left Luqa Airport on 7th May at 10.55 Malta time, but owing to poor visibility the schedule 25 minutes journey took nearly an hour. On arrival at Catania Airport my intimate friend Signor Sebastiano Distefano was waiting to drive me to Zafferana in time for lunch. That afternoon the weather being misty was poor for butterflies, but hymenoptera were active and several species of bumble-bee were noted at various flowers, mostly honey-wort and shaggy vetch, among which were *Bombus lucorum* L., *B. agrorum* F., *B. pratorum* L. and *Anthophora pilipes* F. That evening at the hotel I noticed the geometers *Eupithecia breviculata* Donz. and *Idaea seriata* Schrank, and the Noctuid *Antophila anaphanes* Boursin.

The following day was fine only till 8.30 a.m., but having a quick look by the hotel I netted a "blue" which I thought was *Glaucopsyche alexis* Poda, but was surprised to find instead *Cyaniris semiargus* Rott., a species I had never before taken at this locality. It seems a colony of *semiargus* has lately formed close-by as later I encountered six more including both sexes.

On the 9th, it being fine, butterflies were out in full force. As early as 8 a.m. both *G. alexis* and *Anthocharis cardamines* L. were mating on the heads of the pin-cushion flower at the entrance to the hotel, and by 9 a.m. more butterflies were on the wing: *Euchloe ausonia* Hb., *Pieris napi meridionalis* Heyne, *P. rapae* L. and curiously enough *Leptidea sinapis sartha* Ruhl. another species taken for the first time in this locality, also *Pararge aegeria sardoa* Vty., *Polyommatus icarus* Rott., *Coenonympha pamphilus* L. and *Vanessa cardui* L. 100m. higher up I came across the much desired *Anthocharis damone* Boisid., a male. Those were the species on the wing that morning, but

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other insects were also noticed on the different flowers, such as the small green beetle with the swollen femur—*Oedemera nobilis* Scop., both males and females, the long-horn beetle *Cartallum ebulinum* L., the hopper *Cercopis sanguinolenta* Ill. and quite a variety of hymenoptera new to me.

The 10th being bright and sunny, my friend agreed to drive us to a higher altitude, but before his arrival I saw near the hotel several *G. alexis*, *C. semiargus* and another *A. damone* (a fresh male). Distefano and I then ascended to 1,100 m. and had four stops coming down, collecting in different types of habitat. Our first stop was at a place where the scanty vegetation consisted of a few shrubs and patches of cruciferous plants, and among the few insects noted there were *Pieris manni* *todaroana* Pincit and *Lycaenopsis argiolus* L. The second stop at 1,000 m., although covered with a variety of flowers produced only *A. cardamines*, several *Colias crocea* Fourc. and a few *P. rapae*. The third locality was a mass of yellow asphodel (*A. lutea*) a wonderful sight, and there the skipper *Pyrgus malvoides* Elw. & Edw. was quite common together with *Aglais urticae opima* Vty. and *Pararge megera* L. The fourth and last stop being at a lower level and warmer was more fruitful, with *Iphiclides podalirius* L., *Zerynthia hysipyle* Schulz. and most of the other butterfly species already noticed. The following two days the weather was most depressing with few butterflies being seen and none of note. However, further down at Dagala, now and then a ray of sunshine encouraged insects to fly, and on a labiate plant examples of the metallic green beetle *Chrysomela menthastri* Suffr. were quite absorbed in the propagation of the species.

On the 13th, though dull at this altitude, it looked much brighter elsewhere, so my friend decided to go further north-east of the island. Accordingly we proceeded down the coast along the autostrada from Giarre as far as Taormina Nord and then some distance further north to some waste ground on a hillside covered with many species of wild flowers, though mostly made up of *Bellardia trixago*, *Centranthus ruber*, *Bartia* sp., *Bellis sylvestris* and *Chrysanthemum coronaria*. In the bright sun we noted the Syntomid *Amata marjana* Stauder, and I was particularly pleased to take the Sesiid *Bembecia chrysidiformis* var. *sicula* Le Cerf. and the Ascalaphid *Ascalafus longicornis*. We also disturbed the Noctuids *Synthymia monogramma* Hübn., *Heliothis peltigera* D. & S. and the Geometer *Aspilates ochrearia* Rossi. Several Hemiptera were noticed, the most common being *Pyrrhocoris apterus* L., *Rhinocoris erythropus* L., *Graphosoma lineatum* L. and *Lygaeus pandurus* Scop. var. *militaris* F. A few beetles were also taken: *Scarites buparius* Forst., *Chrysomela banksi* F., *C. grossa* F., *Omophlus lepturoides* F. and *Otiorrhynchus sulcatus* F.

The 14th was again a miserable day with no sun, but the 15th was at last sunny all day and a public holiday in Catania. My friend drove me to Adrano, my favourite collecting place where in previous years I had taken 26 species of butterfly

in under two hours. This locality known as Contrada Rovolito and 660 m. above sea level, is mostly planted with pistacio, prickly-pear, almonds and olives, but the flora is very rich in the narrow sheltered lanes. The first butterfly taken was *I. podalirius* L. followed by the only *P. manni*. *Gonepteryx Cleopatra* L., mostly females, were all tattered, *C. crocea* was fairly common as were *P. icarus*, *A. agestis*, *C. pamphilus*, *P. megera*, *A. cardamines* and *P. daplidice*. The only skipper taken was *Reverdinus marrubii* Rbr. At 1.00 p.m. we went to the only restaurant in the town of Adrano, which is also a night club, and after lunch I took a look at the huge dining-room, and to my surprise found the inner hall smothered with *Arctia villica* L. attracted by the lights of the previous evening; but very soon I was spellbound when I saw two huge moths, not quite dead, pinned to a shelf at the bar: they were *Saturnia pyri* D. & S. the largest moth in Europe. What a surprise! The padrone seeing me so excited quite willingly presented me with one of them. He told me that every year these huge moths visit the lights and often scare the customers. Before leaving we found outside, two huge beetles resting on their backs and waving their legs, these were *Oryctes nasicornis* L. That evening I was invited to dinner some 20 km. from Catania, somewhere in the Vaccarizzo area on the way to Syracuse in open country not far from the coast. There several species of moth visited the lights including *Hyles livornica* Esp. and *Lamoria anella* D. & S. It may be of interest to add that during my stay in Sicily *H. livornica* was noticed in Malta and maybe the specimens seen that evening in Sicily were the arrivals of that migration.

The 16th was another warm sunny day and that morning we drove to Carlentini, and on to Lentini, two closely situated towns at a level of 200 m. and 56 m. respectively. *Maniola jurtina hispulla* Esp. were very common, especially the males which were just emerging; we also encountered the first seen *Papilio machaon sphyrus* Hübn. and *Thymelicus acteon* Rmb. (all males). A sight I shall never forget was the large number of *Amata marjana* resting on the flower-heads of the pin-cushion flower, most of which were mating. This area is also rich in hymenoptera of which the following were seen: *Scolia flavifrons* F., *Eumenes pomiformis* F., *Eucera ruficollis*, *E. longicornis* L., *Anthidium septedentatum* L., *A. fonsstainessii* Lep., *Chalicodoma sicula* Rossi and different species of *Osmia*, *Halictus* and *Polistes*. The following species of Coleoptera were noticed on *Ferula communis* and *Angelica archangelica*: *Labidostomis taxicornis* F., *Agapanthia irrorata* F., *Cartallum ebulinum* L., *Omoplus lepturoides* F., *Nacerda melanura* F., *Scarites nuparius* Forst.; and on *Chrysanthemum coronaria*, I noticed *Anthraxia ignipennis* Hübn., and on a Leliaceae plant, *Exosoma lusitanicum* L. Several species of hemiptera were also collected: *Eurydema ventrale* Kol., *Caloris nemoralis* F. and its forms *picea* Cyr., and *hispanica* F.; *Reduvius personatus* L., and *Eurygaster austriaca* Sch.

My second visit to Sicily this year was from 26th to 31st July. The first thing that struck me was the same dryness of

vegetation as in Malta, especially on the low ground. On the 27th I went up Mt. Etna through Nicolosi to the Refugio Sapienza (1,905 m.). The vegetation there was rather sparse with only patches of *Achillea tomentosa* (Yellow Milfoil), *Helichrysum stoechas* (Stinking Everlasting) and *Saponaria ocymoides* (Rock Soapwort) to give colour to the otherwise dreary expanse of lava. On these plants numerous species of *Procris* were noticed and were easy to collect by hand. Among the butterflies were *Heodes alciphron* Rott. (mostly females and already past their best), *Issoria lathonia* L., *Philotes baton* Berg; also *Hipparchia fagi major* Esp., *Chazara briseis turtatii* Fruhst. and *Hipparchia semele blachieri* Fruhst., but owing to their excellent camouflage when resting on the larva and very fast and elusive flight these three were not so easily taken.

On the 28th I again paid a visit to my favourite haunts of Zafferana (900 m.) where the weather as usual was cloudy, but by beating the dry vegetation large numbers of *Pyronia cecilia* Vallantin were disturbed as well as hundreds of the common Lycaenids together with *M. jurtina hispulla* and *C. pamphilus lyllus*. Later, as the weather improved, *Agapetes galathea procida* Hbst. appeared, and to my great surprise *Hipparchia statilinus maritima* Rost. which I never expected to see on the slopes of Etna and is not mentioned by Sichel (1963a). There, the ant-lions *Creolon plumbeus* Oliv. and *Morter hyalinus* Oliv. were also noticed resting on the stalks of different plants. Both the 29th and 30th were very hot and sunny; on the 29th I saw *G. cleopatra* and *P. machaon* at the blossoms of bougainvillea near Aci San Antonio (161 m.); and the following day at Santa Maria di Licodia (442 m.), *I. podalirius* was very common but difficult to net as the locality is full of fruit trees, also seen were *Polygonia egea* Cr. and *Pyrgus malvoides* Elw. & Edw.

The 31st was a date to be remembered as I never saw so many species of butterfly at one time. I again visited the slopes of Etna on this occasion stopping at a height of 1,700 m. and walking down to 1,400 m., and though sunny it was deliciously cool and refreshing up there after the heat of Catania. At that height vegetation consists mostly of oak, chestnut and *Genista* which was still covered with the yellow flowers and on these hundreds of *Lanpides boeticus* L., quite small in size, were sipping the nectar together with a few *Syntarucus perithous* L. and *Lycaenopsis argiolus* L. On the higher branches of oaks several *Quercusia quercus* L. were zig-zagging in a most complicated way. In between the rows of trees, *A. galathea* and *P. aegeria* flew in numbers. But what struck me most was the great number of the huge *H. fagi major* Esp. that flew fast and rested only on the larva or the tarmac of the road; however, one could attract this butterfly quite easily by baiting with banana skins and water melon rind, so much so that wherever there were people picnicing, one would notice it flying about and then dive down on what was left behind. I was surprised to count nine on a single water melon rind, but as soon as one flew away, all the others followed suit just as rabbits or birds do. On the open



ground *P. cecilia*, *H. alciphron*, *A. urticae*, *I. lathonia*, *P. armoricanus*, *O. venata*, *A. lineola*, *C. crocea* and the usual Lycaenids were common. Further down at a height of 1,500 m. among a vast expanse of *Genista*, *I. podalirius*, *Brenthis daphne* Esp., *M. didyma meridionalis* Stdr. and *Panoriana pandora* D. & S. were flying freely. Among the low vegetation *Hippocrita jacobaeae*, *Sterrhia sacraria* and the micros *Melasima lugubris* Hübn. and *Bradyrrhoa luteola* La Harpe were disturbed. It really was an enjoyable day.

On 1st August, I visited Contrada Ogliostrello, near Taormina, on the heights of Castel Mola (550 m.), and there the commonest butterfly was *Stoperia proto* Ochs. resting on thistles by the road-side.

The following is a list of the Rhopalocera noticed: *Papilio machaon sphyrus* Hübn., *Iphiclides podalirius* L., *Zerynthia hypsipyle* Schultz, *Pieris brassicae* L., *P. rapae* L., *P. napi meridionalis* Heyne, *P. manni todaroana* Pincit, *Pontia daplidice* L., *Leptidea sinapis sartha* Ruhl, *Euchloe ausonia romana* Calberla, *Anthocaris cardamines turritiferens* Vty., *A. damone* Boisd., *Colias crocea* Fourc., *Gonepteryx cleopatra* L., *Vanessa cardui* L., *V. atalanta* L., *Aglais urticae opima* Vty., *Polygonia egea* Cr., *Issoria lathonia* L., *Melitaea didyma meridionalis* Stgr., *Pandoriana pandora* D. & S., *Polyommatus icarus* Rott., *Philotes baton* Berg., *Cyaniris semiargus* Rott., *Glausopsyche alexis* Poda, *Lycaenopsis argiolus* L., *Cosmolyce boeticus* L., *Syntarucus perithous* L., *Lycaena phlaeas* L., *Heodes alciphron aetnea* Turati, *Aricia agestis* D. & S., *Quercusia quercus* L., *Pararge aegeria sardoa* Vty., *P. megera australis* Vty., *Maniola jurtina hispulla* Esp., *Coenonympha pamphilus* L., *C. pamphilus lyllus* Esp., *Hipparchia fagi major* Esp., *H. statilinus allionia* f. *maritima* Rost., *H. semele blachieri* Fruhst., *Chazara briseis turatii* Fruhst., *Pyronia cecilia arminii* Stdr., *Agapetes galathea* L., *Pyrgus malvoides* Elw. & Edw., *P. armoricanus* Ob., *Apodaea aceteon ragusai* Vty., *Stoperia proto* Ochs., *Adopea lineola clara* Tutt, *Ochlodes venata esperi* Vty., *Reverdinus marrubii* Rbr.

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## Current Literature

**Born on the Wind. The extraordinary world of insect flight** by **Stephen Dalton**. Foreword by **Prof. H. Evans**. 74 colour plates. Chatto & Windus. £5.50.

A beautifully produced book which will fascinate entomologists and photographers, and appeal to the non-specialist reader. The superb photographs reveal much that was unsuspected about the flight of insects. The scattering of scales by moths taking off explains why only the bred insect is perfect. Prof. Evans' introduction is informative on energy factors involved in flight.

Basic aerodynamics are discussed and insect flight is shown to be based on different principles. The Pterygota orders are reviewed. Some of the opinions are not supported by observation. *Vespa vulgaris* is not only a fruit and nectar feeder—its main diet is insect protein and fat. Pieridae are not weak fliers—many are active migrants. Does *Acherontia atropos* only feed on honey from bees nests, and how often?

The book ends with a full account of the photographic techniques used and the research needed to overcome the problems involved. — E.H.W.

**Mites Injurious to Economic Plants** by **L. R. Jeppson, H. H. Keifer** and **E. W. Baker**. Roy. 8vo., pp. xxiv+614, 138 text figs., 116 plates. University of California Press, 1975. £19.50

This comprehensive and authoritative digest of the mites known to produce injury to plants used for food, fibre or aesthetic purposes is divided into the following chapters: Introduction to Acari; Population ecology; History of chemical control and mite resistance to acaricides; Principles of chemical control of plant-feeding mites; Biological enemies of mites; Mites and plant diseases; The Tetranychidae Donnadieu; Injurious tetranychid mites; The Tenuipalpidae Berlese; The Tarsonemidae Kramer; The Tydeidae, Tuckerellidae, Pyemotidae, Penthaleidae, Astigmata, and Cryptostigmata; The Eriophyoidea Nalepa; Injurious eriophyoid mites.

Over 700 references are given in the specialised bibliographies. The three appendices include (1) common and scientific names of plants, (2) scientific names of pesticides, and (3) synoptic keys to groups and genera of the Eriophyoidea. A host plant index and general index conclude the work.